State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340 telephone
(801) 359-3940 fax
(801) 538-7223 TTY
www.nr.utah.gov

Michael O. Leavitt
Governor
Robert L. Morgan
Executive Director
Lowell P. Braxton
Division Director

July 18, 2003

CERTIFIED RETURN RECEIPT
7099 3400 0016 8896 3779

Robert Steele
1055 North 4th East
Nephi, Utah 84648

Re: Initial Review of Notice of Intention to Commence Large Mining Operations, Robert Steele, Hi Cal #1 Mine, M/023/071, Juab County, Utah

Dear Mr. Steele:

The Division has completed our review of your draft Notice of Intention to Commence Large Mining Operations for the Hi Cal #1 mine, located in Juab County, Utah, which was received March 27, 2003. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted.

The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. **Please address only those items requested in the attached technical review. You may send replacement pages of the original mining notice using redline and strikeout text, so we can see what changes have been made. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records.** Please provide a response to this review within 30 days or by August 18, 2003.

The Division will suspend further review of the Hi Cal #1 mine Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me, Tom Munson, Paul Baker or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment: Review
cc: Rex Rowley, BLM, Fillmore FO (UTU-078294)

INITIAL REVIEW OF NOTICE OF INTENTION
TO COMMENCE LARGE MINING OPERATIONS

Robert Steele
Hi Cal #1 Mine

M/023/071
July 18, 2003

R647-4-105 - Maps, Drawings & Photographs

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)
Please furnish a minimum of one north-south and one east-west cross-section of the mine area. These sections should show the surface, before mining, after mining and after reclamation. (DJ)

R647-4-106 - Operation Plan

106.3 Estimated acreages disturbed, reclaimed, annually.
Acreage to be disturbed during the life of this operation indicates .5 acres of access/haulroad and .5 acres of overburden/waste dumps. Please indicate on the site map the locations of these features. (DJ)

Attachment #4 map should be modified to indicate the areas to be disturbed (mined) annually for the life of this permit. (DJ)

106.4 Nature of materials mined, waste and estimated tonnages
The plan shows that the overburden depth of 2 feet, but the estimated waste produced during mining is stated as "none". Please review this statement and correct the plan accordingly. (DJ)

106.5 Existing soil types, location, amount
The application says there is between 0 and 24 inches of soil and that 1500 cubic yards is available to be stockpiled. It also contains a laboratory report showing a loam texture, pH of 7.8, and electrical conductivity of 0.7 dS/m. (PBB)

The Division needs additional information about the soils and suggests including pertinent information from the soil survey. The soil survey should provide information about whether there are undesirable horizons that should not be salvaged, but it should also show whether there are potentially deeper soils that could make up for deficits in other locations. (PBB)

The laboratory report does not indicate any problems, but there is no information in the application showing how or where the sample was taken. At what depth was the sample taken, or was it a composite from different depths? Was it a single grab sample or a composite taken in several places? How well does it represent the entire site? Although the analysis indicates the soil is a loam, textural analyses do not necessarily show whether there are coarse fragments. This information would probably be available in the soil survey. The survey should also show how uniform the soil is. Once the Division has the soil survey information and knows how the sample was taken, it should be possible to

determine either what soils should be salvaged or that additional sampling is needed. (PBB)

106.6 Plan for protecting & redepositing soils

This section of the application says 24 inches of soil will be salvaged over an 8-acre area for a total of 1500 cubic yards. The Division calculates that 24 inches of soil taken from 8 acres is 25,813 cubic yards. Please explain this discrepancy. (PBB)

Depending on the results from the soil survey discussed under Section 106.5 above, it may be possible to salvage more soil in some places, but it may not be desirable to stockpile soil from the entire site or from the same depth for the entire site. The Division and the operator need the soil survey information to make this determination. (PBB)

If there is truly only 1500 cubic yards of soil available to be salvaged, there will be an average of just 1.4 inches of soil to spread over the entire site. If this is the case, the operator needs to develop plans to use overburden, waste, or other material as substitute topsoil. There needs to be a minimum of two feet of unconsolidated growth medium. This should consist of at least six inches of topsoil or other material amended to serve as topsoil, and this should overlie at least 18 inches of subsoil or material that could serve as a subsoil. (PBB)

The application needs to show how topsoil will be protected. After being stockpiled, it should be seeded with a seed mix for interim revegetation. The Division strongly recommends that signs be placed near the stockpiles so the material is not used for fill or otherwise wasted. (PBB)

It was noted on a past inspection that the topsoil was contaminated by mining (the windrows of salvaged topsoil were covered with mine waste); therefore, a plan to salvage these soils or mitigate this contamination must be included with the plan. (TM)

106.7 Existing vegetation - species and amount

Vegetation cover is shown as being 50 percent, and the predominant species are sagebrush and native grass. The application should include a vegetation survey that shows cover by species, and it needs to show what vegetation sampling methods were used. A minimum of 10 transects should be sampled from each vegetation community. The Division needs this information both for the revegetation success standard and to ensure the revegetation plan is adequate. (PBB)

The revegetation requirement is that the cover from reestablished vegetation must be at least 70 percent of the cover that existed before the site was disturbed. If the pre-disturbance cover is 50 percent, then the standard is 35 percent. The application says the standard would be 70 percent, so it needs to be changed. (PBB)

106.8 Depth to groundwater, extent of overburden, geology

The plan shows 600' to water; on what is this based? (TM)

106.9 Location & size of ore, waste, tailings, ponds
Please show the size and location of waste piles to be constructed at the site. (DJ)

R647-4-107 - Operation Practices

107.1 Public safety & welfare
107.1.15 Constructing berms, fences, etc. above highwalls
Berms or fences should be constructed above any highwalls that may exist at the site. Signs warning the public of the hazards posed by these features should be placed on the berms or fences. (DJ)

107.6 Concurrent reclamation
In this section, the application refers to Attachment 4 which is a map showing a small reclaimed area on the northeast side of the disturbance. The application needs to discuss whether concurrent reclamation is feasible and how and where it will be done. (PBB)

R647-4-109 - Impact Assessment

109.2 Impacts to threatened & endangered wildlife/habitat
The only listed or candidate threatened or endangered species in Juab county are the bald eagle, Ute ladies' tresses, and yellow-billed cuckoo. With no riparian or wetland areas to be disturbed, it is extremely unlikely any of these species would be affected. (PBB)

109.4 Slope stability, erosion control, air quality, safety
A crusher is being used onsite to prepare the material for removal. Has an air quality permit been applied for from the Utah Air Quality Division? Please include a copy of the application with your response to this review. (DJ)

R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed
The plan does not indicate whether any highwalls will exist during and after mining. Please show the size and location of any highwalls that may result from your mining activities. If highwalls do occur at the site, please indicate the reclamation treatments that will be applied in these areas. (DJ)

110.5 Revegetation planting program
The application needs to discuss seedbed preparation methods. In general, the Division recommends that the topsoil and/or the subsoil be ripped and that the surface be left rough. (PBB)

Attachment 1 includes a proposed reclamation seed mix consisting of crested wheatgrass, thickspike wheatgrass, Indian ricegrass, and fourwing saltbush. It appears these species are all adapted to the site, but depending on what species are growing in the area, some

changes to the seed mix may be needed. This is one of the reasons the Division needs further information about which species are currently growing in the area (see Section 106.7 above). If, for example, there is a lot of cheatgrass, it may be beneficial to include species that compete particularly well with cheatgrass. The amount of crested wheatgrass may need to be reduced. Recommendations or requirements to alter the seed mix will need to wait until the Division has baseline vegetation data. (PBB)

Some species can be either broadcast or drill seeded, but some should only be broadcast. The operator should specify what method or combination of methods will be used to apply seed. (PBB)

The operator needs to commit to seeding the site in the late fall, in other words October or November. (PBB)

R647-4-111 - Reclamation Practices

The plan states "At the completion of mining Rule R647-3-107, 108, & 109 will comply with this mining operation." This statement is confusing because Rule R647-3- are rules to be applied to small mines, Rule R647-4 are rules that apply to a large mine application. The plan should provide a description of which portions of these rules would apply to this operation and the planned actions to address these impacts. (DJ)

111.1 Public safety & welfare

1.15 Constructing berms/fences above highwalls

If highwalls result from mining activities, berms or fencing need to be constructed above these areas. (DJ)

111.5 Land capable of post mining land use

The operator intends to restore the land to a grazing postmining land use, and while the Division assumes this is possible in a sagebrush/grass community, there are not enough details about the existing soils and vegetation and about the reclamation plan to determine whether the postmining land use can be achieved. (PBB)

111.7 Highwalls stabilized at 45 degrees or less

If highwalls occur on the site, the plan should indicate what method would be used to stabilize these areas. (DJ)

R647-4-112 - Variance

The plan does not request any variances.

R647-4-113 – Surety

A blank reclamation surety form is included with this review for your use. (DJ)